

Art Unit: 2800

CLMPTO

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1. (Currently Amended) A method of routing a terminated call to a subscriber from an Internet Protocol based domain **[[IMS]]** to a circuit switched domain **[[CS]]**, wherein said Internet Protocol based domain **[[IMS]]** has call state control functionalities implemented,

said method comprising the steps of

receiving an invitation **[[S1]]** of said subscriber for a call by at least one call state control functionality within said Internet Protocol based domain **[[IMS]]**;

obtaining **[[S5]]** the profile of said subscriber from said home subscriber serving means **[[HSS]]** to a call state control functionality **[[S-CSCF]]**;

requesting **[[S7]]** further routing information from said home subscriber serving means **[[HSS]]** to a call state control functionality **[[S-CSCF]]**;

requesting **[[S7]]** further routing information from said home subscriber serving means **[[HSS]]**;

requesting **[[S9]]** a switching means **[[VMSC]]** within said circuit switched domain **[[CS]]** currently visited by said subscriber for said roaming number by said home subscriber serving means **[[HSS]]**;

returning **[[S10]]** said roaming number of said subscriber to said home subscriber serving means **[[HSS]]** by said visited switching means **[[VMSC]]**;

returning **[[S12]]** said roaming number as said further routing information from

said home subscriber serving means **[[HSS]]** to said call state control functionality **[[S-CSCF]]**; and

establishing **[[S131-S133]]** said call via gateway means **[[BGCF, MGCF]]** for connecting said domains **[[IMS, CS]]** as well as via said visited switching means **[[VMSC]]** to said subscriber.

2. (Currently Amended) A method of routing a terminated call to a subscriber according to claim 1, wherein

subsequent to the receipt of said invitation **[[S1]]**, a step of requesting **[[S2]]** the location of said subscriber from said home subscriber serving means **[[HSS]]** is performed; and

subsequent to said return of an indication **[[S3]]**, a step of inviting **[[S4]]** another call state control functionality **[[S-CSCF]]** for said call is performed, wherein said other call state control functionality **[[S-CSCF]]** performs all subsequent steps mentioned in claim 1 as related to said call state control functionality.

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3. (Currently Amended) A method of routing a terminated call to a subscriber according to claim 1 [[or 2]], wherein an IP multimedia functionality and a subset of home location registering functionality are integrated into said home subscriber serving means [[[HSS]]], and

said registering request [[[S2]]], if applicable, and return [[[S3]]] is performed with said IP multimedia part;

said profile request [[[S5]]] and download [[[S6]]] is performed with said IP multimedia part;

said roaming number provision requesting step [[[S7]]] as executed to said home subscriber serving means [[[HSS]]] is performed with said IP multimedia part;

subsequent thereto, a step [[[S8]]] of requesting said home location registering part for the provision of the roaming number of said subscriber is performed by said IP multimedia part;

said roaming number provision requesting step [[[S9]]] as executed to said visited switching means is performed with said home location registering part;

said roaming number returning step [[[S10]]] as executed by said visited switching means [[[VMSC]]] is performed with said home location registering part;

subsequent thereto, a step of returning [[[S11]]] said roaming number from said home location registering part to said IP multimedia part within said home subscriber serving means [[[HSS]]] is performed; and

said roaming number returning step [[[S12]]] as executed to said serving call state

control functionality **[(S-CSCF)]** is performed by said IP multimedia part.

4. (Currently Amended) A method of routing a terminated call to a subscriber according to claim 1, wherein the step of requesting **[(S7)]** further routing information from said home subscriber serving means **[(HSS)]** involves the overriding of at least one terminating call related service functionality within said home subscriber serving means **[(HSS)]**.

5. A method of routing a terminated call to a subscriber according to claim 4, wherein the terminating call related service functionality is a supplementary service functionality.

6. A method of routing a terminated call to a subscriber according to claim 4, wherein the terminating call related service functionality is an intelligent network trigger information related functionality.

7. (Currently Amended) A method of routing a terminated call to a subscriber according to claim 1, wherein

said step of requesting [[[S7)]] further routing information is performed by submitting a Send Routing Information message;

said step of requesting [[[S9)]] the provision of the roaming number of said subscriber are performed by submitting a Provide Roaming Number message;

said step of returning [[[S10)]] said roaming number of said subscriber is performed by submitting a Provide Roaming Number acknowledgment message; and

said step of returning [[[S12)]] said roaming number as said further routing information is performed by submitting a Send Routing Information acknowledgment message.

8. (Currently Amended) A serving call state control functionality device for providing a routing service to a circuit switched domain [[[CS)]]], said serving call state control functionality [[[S-CSCF)]] device providing a functionality of an Internet Protocol based domain [[[IMS)]] and comprising means which are adapted to perform related steps of ~~any one of the methods according to claims 1-5~~ the method according to claim 1.

9. (Currently Amended) A home subscriber serving device capable of using routing information for terminating a call to a subscriber, comprising

an IP multimedia part and a home location registering part interfaced **[(S8, S11)]** to each other,

wherein said home location registering part comprises transceiver means **[(S9, S10)]** capable of requesting and receiving roaming numbers from the circuit switched domain.